9. Pacemaker co-operatives across primary industries: what drives organisational resilience? *Elena Mamouni Limnios, Tim Mazzarol and Geoffrey N. Soutar*

INTRODUCTION

Co-operatives can reduce member transaction costs through backward or forward integration in the supply chain (Bonus 1986; Nilsson 2001) and can have a significant impact on market dynamics, sometimes avoiding or correcting market failure. A number of cooperatives can be formed in a market to address these concerns or to create local infrastructure in the absence of government and private investment (Heriot and Campbell 2006). In some markets, smaller co-operatives gradually merge or demutualise, leading to the survival of a single (and commonly large) co-operative that can be a very successful and resilient organisation, being what LeVay (1983) calls a "pacemaker" in the market. Although the price differential between the co-operative and its investor-owned competitors gradually falls, or may even become non-existent, the mere presence of the co-operative ensures the efficiency and competitiveness of the industry to the long-term benefit of the co-operative's members and non-members.

In this chapter we examine the nature of pacemaker co-operatives, using two Australian co-operatives that play this role in their respective markets as examples. Murray Goulburn Co-operative Co Limited (MG) is the second-largest co-operative in Australia, with an annual turnover of 2.24 billion (Co-operatives Australia 2011) and is the only dairy co-operative remaining in the State of Victoria. Geraldton Fishermen's Co-operative Ltd (GFC) is number 21 on the top 100 co-operatives list, with an annual turnover of \$145 million (Co-operatives Australia 2011) and is the only remaining fishermen's co-operative in Western Australia. Despite their different industry sectors and organisational structures, an examination of these co-operatives suggests a number of similarities in their member value proposition, business models, organisational strengths and challenges. We discuss these findings in an attempt to identify the characteristics of a resilient pacemaker co-operative, the inherent challenges of such business models and how these can be best overcome or ameliorated through appropriate management strategies and organisational structures.

MURRAY GOULBURN

1950-57: Establishment

The co-operative was established in 1950 in the State of Victoria, as the Murray Valley Co-Operative Dairy Produce and Trading Company. The first plant at Cobram received

its first milk in 1951. The plant was big and, although starting big was challenging, it allowed the co-operative to remain competitive in the long run (Watson 2000, p. 28). In 1952, Jack McGuire was appointed manager. McGuire became a legend in the dairy industry over the next three decades for his ability to inspire loyalty and a collaborative spirit in farmers, even in tough years, bringing smaller co-operatives under the MG banner but also making tough business decisions when necessary. By 1955 Murray Valley had 216 suppliers, making it one of the largest co-operatives in the north of Victoria, and in 1957 the first amalgamation took place with the Nathalia factory.

1957-1973: Mergers

In the 1960s and 1970s MG embarked on an aggressive growth strategy, with 19 factory mergers and amalgamations by 1966, when MG commenced a rationalisation and rebuilding program of older and smaller factories that were inefficient, including the 1967 move of its head office from Cobram to Melbourne. Amalgamations continued into the 1970s, with two mergers in 1973 doubling MG's size, making it the largest dairy company in Australia. Shareholders increased from 13,500 to 35,000 and turnover reached \$121 million (Watson 2000). As one interviewee commented:

Mum and dad were involved in the very early days in Murray Goulburn and all these issues and she said, we have always been the tall poppy, no one wants to come along with us but look at what we have done for them. (MG Board Member, 2011)

Some of these mergers were overwhelmingly supported by the shareholders of the smaller factories, who, in many cases, approached MG with offers to merge. In other cases, long battles took place among factory stakeholders who wanted to maintain their locality and independence. Merging with MG was seen by many farmers as the "lesser of two evils", as proprietary companies were also making bids to purchase smaller co-operatives.

1973–1984: Drastic Restructures

MG's mergers in the 1960s and 1970s left the co-operative with a number of underperforming facilities and a board of 50 directors by 1973. The philosophy behind this growth strategy was the realisation that the only way to remain efficient was to have a sufficient amount of milk (source: interviews 2011). MG was effectively "buying" members/suppliers, commonly for an inflated price of 1.5 to 3 MG shares for one share of the smaller company. This left MG with a number of older, underperforming facilities.

In the early 1970s the industry consolidated substantially. Australia had sold its dairy produce into the United Kingdom, but when Britain joined the European Community ("Common Market") in 1973 it became a closed market. Australia was therefore forced to find alternative markets for its dairy products. As a consequence, between 1970 and 1975 the industry almost collapsed. MG commenced a major restructure in the period 1973 to 1974, and decided which factories to retain and which to close and how to rearrange staff. The board of 50 was reduced to 20 and then ten (Watson 2000, p. 185). Shut downs caused local distress, but were necessary for MG's survival and efficiency.

In the early 1980s MG was facing high costs of servicing debts, and was unable to match competitors' prices, which saw the co-operative losing members and therefore

supply. Jack McGuire, who had stepped down as CEO only two years earlier, was asked to return to save MG. Known as "Jack the Knife", he motivated members/suppliers to stay with MG and took drastic measures to cut expenses, reporting on the company's recovery within a year. Profit rose in 1982 from \$3 million to \$4.1 million and non-current liabilities were reduced from \$15 million to \$7.7 million (Watson 2000).

Late 1980s and 1990s: Adjusting to Deregulation

In 1987 the "Kerin Plan" – named after the then Federal Minister for Primary Industries (Hon. John Kerin) – resulted in the phasing out of the product pooling system in Australia, allowing farmers to get a better return for the quality of their product. Until then producers were paid the average of the pool (butter, cheese, whole milk powder and casein pool), not what was obtained from their produce. The Kerin Plan and the emergence of closer economic relations with New Zealand increased domestic competition and drove technological advancements and efficiency improvements, stimulating milk industry growth in Australia.

MG's strategic shift in the mid to late 1980s towards new product development and marketing was not successfully operationalised, and in the early 1990s its strategic focus became internally focused towards cost cutting and operational improvements. Over the next decade MG introduced a number of technological advancements, including membrane technology, robots and processing the whey, as well as operational improvements in waste management, environmental protection and industrial safety (source: interviews 2011).

In 2000 the Australian Federal Government's Domestic Market Support Scheme expired. This phasing out of Commonwealth government support for manufacturing milk and state government regulation of domestic drinking milk resulted in a considerable restructuring of the Australian dairy industry (Hogan, Shaw and Berry 2004), introducing a gradual change of focus towards exporting and product differentiation for MG and others at the forefront of the industry.

2002–2012: Innovation and New Business Investment

In the last decade MG invested in new business development and product innovation with a strong export orientation. Some of the critical investments in this decade included the 2002 opening of a trade office in Tokyo and, in 2004–2005, the acquisition of Lavery International (a dairy product trading business) and the formation of Australian Milk Products Pty Ltd, a joint venture with Australian Dairy Goods, to sell directly into the Latin American market. In 2007, the MG Qingdao factory opened in China and, in 2010, MG formed a joint venture with the Spanish-French dairy and food corporation Danone to enter the Australian yoghurt market. In this period MG experienced several difficult seasons due to drought or floods, in addition to the impact of the 2008–09 global financial crisis which led to an international collapse of dairy product prices. Despite these challenges, by 2012, sales revenues were increasing.

At time of writing, the Murray Goulburn Co-operative Co. Limited (MG) remained a 100% farmer owned, 100% Australian dairy company. Although MG is registered under the Corporations Act 2001, it operates as a co-operative and is recognised as such for

tax purposes in Australia. MG has 12 wholly owned, smaller in size, proprietary companies, and has a controlling interest (51%) in another three entities, including a factory in China and equity investments ranging from 23.5 to 50.0% ownership in seven associated companies, primarily dairy product retailers and exporters (Murray Goulburn 2011). In 2011, MG was also shifting from a commodity export based business to an active player in the fast moving consumer goods market within Australia.

GERALDTON FISHERMEN'S CO-OP

Historical Overview

The Geraldton Fishermen's Co-operative Ltd (GFC) was founded in 1950 in the midwest coastal city of Geraldton, Western Australia (WA). Its establishment purpose was to correct the local market in which the price of rock lobster was controlled by processing companies, to the detriment of local fishermen. Consignments, market prices and returns to fishermen increased steadily over the first two decades following its founding. This was also driven in part by the booming US economy, which was a major export market for GFC, and led to the co-operative investing in technology upgrades and expansion (Gray 2000). The co-operative was experimenting with additional services and by the end of the 1960s, in addition to rock lobster processing, it was processing fish, operating carrier boats, purse-seiners, prawning, and bait stores, and providing business loans to fishermen.

By the 1970s the co-operative was looking for other market opportunities and took steps to broaden its exports. The market had corrected itself and, by 1980, GFC's membership had fallen to around 100, due to pressure from other processors. In the early 1980s the co-operative made the strategic decision to market its own products and control its international affairs. Since 1953 a marketing agency had been buying and marketing nearly all of the co-operative's rock lobster production. However, in 1984, the board decided to cut ties with the marketing agents and deal directly with US buyers (Gray 2000, p.84). In the 1980s, GFC invested in product innovation, experimenting with extracting the meat from rock lobster heads and with the export of live lobster, which commenced in 1986. The co-operative has been building its R&D capacity ever since.

In 1985 the co-operative experienced a difficult year and was close to failing, which led to the appointment of investigative accountants to review the operation. The subsequent report's findings appeased the membership. From the mid-1980s to the mid-1990s the co-operative suffered from a number of conflicts at the board level. For example, in the period 1988 to 1991 the board considered restructuring the co-operative into a public listed company, but the directors could not reach an agreement and were evenly divided, which meant the proposal was never taken to the membership. In 1993, almost half of the board resigned and set up their own rock lobster processing company. As a result of this restructuring the GFC board became more united and was able to focus on strategic decision making.

From the mid-1990s onwards the co-operative grew steadily, despite fluctuations caused by the volatility and competitiveness of international markets. In 2002, GFC

made a strategic decision to expand its operations south along the WA coastline from Geraldton to Fremantle (a distance of approximately 430 kilometres).

This move followed the demutualisation of the Fremantle Fishermen's Co-op, which had left GFC as the only co-operative in the WA rock lobster industry. The expansion boosted member numbers by one-third and GFC gradually overcame challenges associated with the fishermen's bitter experience of the Fremantle Co-op's demutualisation. This was driven by a sentiment that GFC was partly at fault for their co-operative's failure. It also had to deal with the dissatisfaction of some fishermen in the north, who did not want to subsidise the southward expansion (source: interviews 2011). In 2007, GFC opened new extensions to its live lobster storage and export facility in Fremantle and purchased the major assets of another processor (Westar Lobster Pty Ltd).

Despite concerns about the sustainability of the fishery over recent years, Western Australia is still the largest single spiny lobster fishery in the world. In 2011, GFC has a market share of between 49 and 51% of the WA rock lobster industry (source: interviews 2011). It also contributed significantly to alerting the WA State Government to environmental concerns, which led to a regulated quota system that should enable the fishery to rebuild itself. Through this period, GFC has been a trend setter in educating fishermen and improving the quality of the industry.

BUSINESS MODEL COMPARISON

Despite operating in a different industry and differing in size and legal status (as MG is incorporated under the Corporations Act), the two business models have many similarities.

Member Value Proposition

The co-operatives were established to maximise the return to their members, just like an investor-owned firm aims to maximise shareholder returns. Both MG's and GFC's main value proposition to their members is that they operate so as to deliver long-term financial benefits to their members and their families, while contributing to the improvement and growth of members' businesses. The co-operatives are both fully owned by their members and are therefore viewed by management and the board as an extension of members' business.

We get out of bed in the morning for the purposes of maximising the return to the farmer (MG Executive Manager, 2011)

The fishing boats are not separate businesses to the co-op; the co-op is the head of the octopus and the tentacles are the boats (GFC CEO, 2011)

GFC purchases western rock lobster from its members, which is then exported. It also gets small amounts of octopus as a by-product. The co-operative also supplies goods and services to members and non-members through its marine store, hard stand (which stores boats) and boat lifting equipment. It also provides other services to members. However, these are only a small part of GFC's business compared to the rock lobster

trade. As rock lobster fishing operates under a quota per pot system, the co-operative also leases pots, which it then sub-leases to its members. This is expected to become a larger part of the business, especially as the co-operative's members (and pot-owners) are ageing. Currently pot-owners are not members of the co-operative. To be a member of the co-operative one needs to be an active fisherman.

Similarly, MG purchases whole milk from its members, which is processed and either exported or sold domestically under its own retail brands. Indeed, the sales of its "Devondale" brand of dairy products accounted for 10% to 12% of MG's total turnover (source: interviews 2011). A key aspect of MG's member value proposition is that it will "grow with its members", providing a guarantee that it will buy all the milk members want to supply, the first and last litre valued equally:

Murray Goulburn takes all the milk that a member wants to supply (MG Board Member, 2011).

This is unlike the non-co-operative milk processors that agree on a milk price for a certain volume, after which they will pay much less or even charge farmers to get the milk off their hands. GFC follows the same strategy, but market dynamics in a quota regulated, environmentally sensitive sector is such that volume has decreased and most processors are trying to continuously maximise their input, not only the co-operative.

Equity Structure and Profit Formula

While MG has various classes of shareholders (being an unlisted public company), only active suppliers hold ordinary shares that have voting rights. Various classes of these ordinary shares reflect different schemes introduced for suppliers at various stages. Retired suppliers are given the opportunity for MG to sell their shares to existing members, or they can roll their shareholding into preference shares that do not have voting rights and keep them as an investment. Employees can also own preference shares (with no voting rights). Preference shares attract a reduced dividend (e.g. 8% when ordinary shares attract about 10 to 12%).

In the case of GFC, only active suppliers can be shareholders (which is a legal requirement under the WA Co-operatives Act). However, GFC has a very similar scheme to that of MG, as they offer retirees the option to roll their shareholding into debentures that attract a fixed dividend referable to the rate set by the Reserve Bank of Australia (RBA plus $\frac{1}{2}$ %).

In both cases, member suppliers are required to gradually build up their shares to reflect their patronage. GFC achieves this by awarding bonus shares proportional to patronage on an annual basis, whereas MG requires shareholding to be gradually built up through share purchases (resulting in a capital infusion for the co-operative when milk volume increases). Shares in both cases are redeemed at par value and both co-operatives have a cap on the maximum shareholding of an active member, thus maintaining the democratic nature of their co-operatives.

Active member-shareholding is effectively a fixed deposit that members cannot access unless they cease trading with the co-operative. The two structures differ in that MG's shares are non-redeemable, but transferable on retirement (the co-operative facilitates the sale of shares amongst its members), whereas GFC redeems member shares should that be the member's preference on retirement.

The other key difference from a governance perspective is that GFC follows the "onemember-one-vote" principle, whereas MG links votes to the amount of litres of milk that each member supplied. One vote is attributed to every litre of milk. Members are allowed to own up to 0.05% of MG, but their voting shares are capped in relation to the milk they supply on an annual basis. This system leads to voting rights being proportional to patronage.

Both co-operatives primarily reward their members through patronage, through lower transaction costs and, in the case of GFC, though a rebate associated with some services. It is worth noting that both co-operatives maintain transparent pricing and all members are charged the same price for the same service at a given point in time. This key aspect of their profit formula is in line with the co-operative principle of "Member Economic Participation", according to which member benefits are awarded in proportion to the business conducted with the co-operative, rather than the capital invested. Larger members are therefore not offered any discount per unit of transaction. This strategy has significant implications for the pacemaker co-operative's competitiveness, which will be discussed subsequently.

PACEMAKERS' SUCCESS STRATEGY

Volume and Efficiency

Neo-classical economic theory views the co-operative as a business form that aims to reap economies of scale through large volumes of business in markets in which the cost curve has a declining pattern (Nilsson 2001). Pacemaker co-operatives confirm this theory, with MG and GFC being the largest players in their respective industries, their profitability being dependent on volume in their markets driven by operational efficiencies. Interviewees stressed the importance of efficiency, especially in a contracting market. While both organisations considered themselves efficient operators, they recognised the importance of continuous technological and process improvements to increase their operational efficiency and, thus, market competitiveness even further. As one respondent put it

In a contracting market you have got to become much more efficient. I'm not saying we haven't become more efficient, but the question is have we become efficient enough? (MG Interviewee, 2011)

Cost efficiency is also driven by the volume of business, both co-operatives recognising the two-way relationship between these variables. If these co-operatives lose volume, they become inefficient, as the cost per processing unit rises. Similarly, if the co-operative becomes inefficient in comparison to other market players, it will lose suppliers and, thus, volume to its competitors. Examples of other co-operatives in both industries that have failed in recent and historical times confirm the significance of keeping track of operational costs and ensuring cost efficiency. Both GFC and MG are the last remaining co-operatives in their industries. In Western Australia another large rock lobster co-operative in Fremantle failed in recent times after facing severe financial pressures. Whereas management issues, a lack of retained capital and dry shareholdings were all noted as drivers of the co-operative's collapse, the final cause was its geographical extension in the last years of its operation that increased the co-operative's cost base significantly. Similar examples can be found in the milk industry in Victoria, which was dominated by the presence of co-operatives in the 1960s and 1970s. Over recent decades there has been a gradual consolidation of smaller, inefficient co-operatives, to larger organisations that have the volume and technology to become more cost efficient. The co-operatives' gradual failure in an increasingly competitive market was primarily attributed to a lack of effective governance and operational efficiency. This was noted by one interviewee:

Co-ops in the dairy industry have failed primarily because of their inefficiency; their inability to process that milk and outside investors see opportunities to make some money out of that. (MG Board Member, 2011)

Product Innovation and Branding

Both MG and GFC are export oriented, as there is strong international demand for their products. They share a strategic drive for product and process innovation that has generated significant value for the co-operatives and their members. GFC is one of the few, if not the only, seafood processor in Western Australia that has a permanent full-time R&D capacity, as they believe that well spent money in R&D will generate significant benefits for their members. As some GFC board members commented:

We buy the one product from fishermen, but the permutations and combinations of what you can do with that product comes out to about 150. (GFC Executive Manager, 2011)

You need to show some reasonably short cycle return on investment, but even so, we have worked a lot with the universities and other research providers on the longer term, high risk stuff . . . we have worked on specific confidential projects; we have worked on industry wide projects and worked closely with our members on certain fisheries type projects. (GFC Executive Manager, 2011)

Examples include their work on product innovation, being one of the major players in live lobster export over the last 25 years, and continuous innovations with product development and process refinement. This has produced about 150 different types of product output. Further, their scientific innovation and education of fishermen on best practice to maximise the quality of their output and protect the fishery has made a significant difference across the industry. GFC was the first to alert the State Government about environmental concerns and has worked closely with the Government to ensure the supply of fish is sustainable.

MG has a clear innovation and product value adding strategy. It has identified three ways of adding value to its products. The first one is extracting a premium out of a commodity market. For example, should a customer want to buy skim milk, MG would examine the purpose of use and innovate with the product formula to provide a better product for that particular purpose and extract a small premium over a large volume

of product. Its second method is tailor making individual products it calls "functional foods" (e.g. finding a way to use milk solids within a particular food that may result in hundreds or thousands of dollars a tonne more for its milk product). The third method is the development of what MG calls "pointy end products", which are sophisticated products, such as nutritional supplements, high-end infant juvenile nutrition, elite sport products and pharmaceutical products. The latter category is a higher risk investment that has potentially very high returns. As one interviewee explained:

MG's innovation strategy embraces doing all of those three things and apportioning a priority for them in direct relationship to the value you can actually get in the hand. (MG Executive Manager, 2011)

MG has a Research and Development Advisory Committee that follows a formal process in examining the potential of product and process innovations, which can be driven by push and pull factors (MG and customer driven), authorising investments and overseeing the R&D work of the process engineering group and the research and development technical services group.

In addition to prioritising process and product innovation to remain competitive and extract the maximum value for their members, MG and GFC also recognise the significance of branding in capturing value. GFC has invested in a strong brand name, identifying that as one of the key competitive advantages in the marketplace. Its brand name enables it to get a premium for its product and has resulted in significant customer loyalty in overseas markets, such as China. As one interviewee noted:

Our brand name [GFC] is probably our biggest advantage and especially even more so in the last 12 months because of the closures with the Chinese border . . . Because our quality is better we are the preferred supplier, if there are issues they know our lobsters will stay alive. (GFC Board Member, 2011)

MG has historically been a commodity export based business but, over the past few years, has diversified into fast moving consumer markets. It has identified the value that can be added through brand building, with Devondale, the flagship brand, currently generating 10% to 12% of turnover (source: interviews). However, MG also recognises that it doesn't have the power to compete with international giants, such as Kraft and Nestlé, and a large part of the business will always remain a commodity product. MG has therefore followed an intelligent strategy, partnering with a powerful international brand to enter the Australian domestic yoghurt market. In 2010 MG formed a 50-50 joint venture with French food and Fortune 500 Company Danone to market yoghurt and other fresh dairy products in Australia.

MG has also taken Devondale internationally by leveraging existing customers who have an appetite for an Australian domestic brand and want to support it in an overseas market. This strategy reduces the level of investment needed from MG and the investment risk. MG has gradually developed retail partners in Asia and in Europe, for which it is also doing some local manufacturing, a good example being its infant formula packaging plant in China. These relatively small joint ventures add good value and are pursued while, at the same time, the co-operative captures the large opportunities for commodity exports in growing markets, such as South East Asia, Central America and the Middle East. The growth and demand in these markets is for the ingredients sold to the big international brands. MG is effectively spreading the risk of international market volatility by competing (a) in international markets for ingredients and in a small way in brands; (b) in the domestic market for ingredients; (c) in the domestic market for brands and (d) in the domestic market by supplying house brands to supermarkets (effectively a commodity business as well).

A DOWNWARD SPIRAL?

Environmental Dependence and Equal Member Benefit

Primary industries are dependent on the external environment, as the natural environment impacts on product volume and quality, while market and legislative environments influence demand, supply and pricing. Co-operatives seem to be particularly vulnerable to the external environment, especially traditional pacemaker co-operatives that are committed to providing an equal proportional benefit to their members.

Most co-operatives are initially formed to address a strong member need and are likely to deliver a large price differential to their members or a service that is otherwise not available. A pacemaker co-operative in a highly competitive market is less likely to be able to deliver a significant price differential to members in a sustainable fashion. In the absence of an external constraint and the initial strong need, individuals develop a tendency to break pacts and look for short-term gains (LeVay 1983), sometimes to the detriment of their own or the group's long-term benefit.

In a good market, most processors are able to get enough volume to ensure costeffective processing and the co-operative benefits through its transparency and adherence to the "Member Economic Participation" principle, which requires economic benefits to be delivered proportionally to business done. The co-operative is likely to return a good rebate or distribution in addition to the agreed price, which strengthens its competitive position. In markets such as the NSW milk industry, processors pay slightly more or less than the pacemaker co-operative to increase or reduce the amount of volume they require; the co-operative effectively sets the floor-price for the commodity product. In a good market, MG is the only processor that will not penalise members for greater supply than what was agreed, being committed to "growing with its members". This is another strong incentive for farmers to supply the co-operative in a good year.

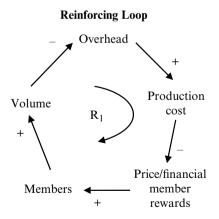
Whereas transparency and equal proportional member benefit can be the cooperative's greatest strength, in turbulent market conditions this strategy can place the co-operative in a very challenging position. Combined with (a) a pacemaker cooperative's large size and volume requirements to ensure operational efficiency, and (b) members' short-term investment focus which is further intensified by financial tensions experienced in low markets, co-operatives' rigid price structures disadvantage them against investor-owned competitors who negotiate pricing with suppliers individually.

Individual price negotiations allow investor-owned processors to spread their risk across a range of price agreements, and offer a better price, depending on the size of the contract/supplier, attracting larger suppliers and/or desired product volumes. The occurrence of multiple low seasons in a row has historically contributed to significant financial pressures for primary industry co-operatives, in some cases leading to co-operative failure or demutualisation. It is worth noting, however, that resilient co-operatives have been able to remain competitive and true to their co-operative principles. We discuss some of these strategies that contribute to co-operative resilience in the last section of this chapter.

The Low-volume, High-cost Trap

Complex systems theory can help us better understand the underlying patterns and processes of the identified problem. Complex systems thinking and causal loops diagrams have been widely used to study socio-ecological systems, addressing impediments that have historically slowed or prevented learning feedbacks from happening (Sterman 1994). Their use has also been extended to corporate systems, assisting organisations to understand interrelationships between their model parameters and enhance their strategies (Kunc 2008). Strategic effectiveness requires a holistic view of the organisation and its environment, and systems thinking can provide a useful framework for modelling, simulating and experimenting with proposed strategic designs. In order to achieve such a dynamic, quantitative perspective, advanced information systems need to be in place (Fowler 2003). Effective conceptualisation of feedback loops and organisational dynamics can provide invaluable input to strategy development.

A Causal Loop Diagram (CLD) provides a visualisation of cause and effect relationships, assisting in recognising and responding to observed patterns of behaviour. The CLD representation shown in Figure 9.1 enables us to visualise the relationships between key variables that impact on a co-operative's competitiveness. This type of loop is called a "Reinforcing Loop," as opposite relationships (indicated by a negative sign on the diagram) are even in number and cancel each other. This can result in the reinforcement of desired change (a phenomenon known as a "virtuous cycle"). However, if the



Note: + or - indicates that the two variables connected by the arrow change in the same (+) or opposite (-) directions.

Figure 9.1 Pacemaker co-operative reinforcing loop

direction of change alters, this leads to negative reinforcement and the experience of a "vicious cycle."

For example, a good season leads to more volume throughput, reducing overhead costs per unit, lowering the cost of production and ensuring a better price or return to members, leading to more members supplying the co-operative and to even more throughput. If a co-operative has a few bad seasons in a row, that leads to higher overheads and production costs and lower prices, fewer members to do business with the co-operative and, thus, even less throughput and higher overheads. This vicious cycle can be disastrous, and evidence of such phenomena is clear in the MG case, in the Fremantle Fishermen's co-operative in WA and in the history of SACBH, a pacemaker co-operative in the South Australian grain industry that privatised and became a takeover target.

External environmental pressures are not the only factors that can trigger a vicious cycle. Any operational or strategic challenge that negatively impacts on the cost of production or a co-operative's financial viability and, thus, members' financial benefits is likely to have the same result. Co-operatives experiencing such challenges risk becoming trapped in a low-volume, high-cost "downward spiral" unless they can find a way to break or balance the reinforcing loop.

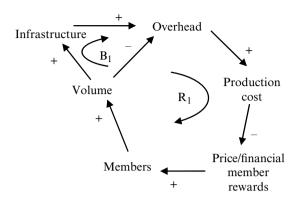
RESILIENT PACEMAKERS

A systems thinking approach suggests identifying leverage points (places in the system) where a force can be applied to create a lasting impact in terms of reversing a trend or breaking a vicious cycle. Leverage has much deeper implications than merely finding a solution to a problem, as it often involves fundamental and long-term changes to the system (Maani and Cavana 2000). In order to identify leverage points we need to consider which changes could impact on the dynamics of the identified cause-effect relationships.

Flexible Infrastructure

Both MG and GFC have at times scaled down their infrastructure to balance overhead increases in a low season. In the GFC case, infrastructure consolidation for operational and cost efficiency has been a key strategy as a result of changes in lobster numbers and the introduction of a quota system that flattens the levels of supply, reducing extreme peaks and lows. However, in most cases the adjustment of infrastructure is costly and sometimes cannot occur in a timely manner and can create a series of operational challenges.

The challenge lies in innovatively re-designing co-operative operations to enable timely downscaling or upscaling depending on the season forecast, thus keeping overheads stable. Co-operative Bulk Handling, the largest co-operative in Australia, is an example of a co-operative that has such adjustable infrastructure in place. The grain handling co-operative has a sophisticated system in place to determine the number and location of collection points that will be operational each season and has educated its members to the point that they largely accept this decision that transfers part of the



Infrastructure Balancing Loop

Figure 9.2 Pacemaker co-operative with flexible infrastructure

cost and risk directly to them. Although the system needs a minimum volume to break even, the impact of seasonality on overheads has been greatly ameliorated. Figure 9.2 illustrates the creation of such a Balancing Loop (B_1) , which counteracts the primary Reinforcing Loop (R_1) .

Diversify to Spread the Risk

Most resilient pacemakers address environmental uncertainty through carefully planned diversification in related industries that can capitalise on the core competencies of the organisation and provide an additional source of income that boosts profitability in low years. This strategy mediates the relationship between core production costs and members' annual financial rewards (Figure 9.1). This additional source of income can be used to boost members' benefits, potentially more so in low years, as well as generating needed investment capital for the core business. MG clearly follows such a strategy with a series of joint ventures, which have already been discussed.

Obviously any diversification introduces challenges associated with managing a more complex business and needs careful financial and strategic consideration to ensure the benefits outweigh the costs and any associated risks.

Invest in Member Loyalty

Whereas, in a pacemaker co-operative, some members are driven by short-term financial interest and may shift to competitors for a better price, there is a loyal member base, whose price sensitivity is significantly lower. Investments in member loyalty can weaken the link between members' financial rewards and members' commitment to the co-operative, reducing the number of members that shift for a given price differential.

Emotional connections

Although there is a strong body of literature in consumer behaviour that has studied the drivers of consumer loyalty, there is a minimal systematic application of this body of work in the co-operative sector. A preliminary study by Mazzarol, Soutar and Mamouni Limnios (2012) suggests the emotional connections members have with their co-operative can be the primary drivers of loyalty. An earlier study by Birchall and Simmons (2004) also found a sense of shared community values and goals between members and among the co-operative and its members is a key motivator and determinant of members' participation in the co-operative. Many co-operative managers, especially in primary industries, tend to underestimate the impact of emotional member commitment, expressing a view that their members are primarily driven by price (source: interviews 2011 and 2012). It seems there is an opportunity for the co-operative sector to systematically quantify the drivers of member loyalty, thus improving understanding and ability to strategically impact on members' commitment.

Stronger contractual terms and longer-term financial incentives

Member businesses commonly have a weak contractual obligation with the cooperative, in comparison to other types of organisational business-to-business networks (e.g. a franchise). This can contribute to low loyalty and the emergence of free riding behaviour. Some co-operatives have attempted to address this challenge by developing rules of association that require a minimum level of patronage to retain membership. In Australia, defining this minimum level of patronage has become a legal requirement in most states. The New Generation Co-operatives have also attempted to address the free rider problem through a tighter linkage between patronage and share ownership rights.

Some co-operatives have also introduced policies that create longer-term financial incentives or directly penalise free riding. Awarding shares or a reward payment in relation to annual patronage is one such strategy. MG has gone a step further by only making a loyalty payment to members who are still with MG on the day the announcement is made. This creates a financial incentive to stay with the co-operative for the whole year; if a member leaves prior to the completion of the year and the announcement of the award, they forfeit any loyalty payment associated with the volume they have put through the co-operative. According to one MG respondent:

You need to be with us on the day that the announcement has been made for you to get the [loyalty] payment back over the course of the year. (MG Board Member, 2011)

GFC in its early years (as early as 1964) had a policy according to which any shareholder who supplied an outside company with lobsters would lose membership and the advantages that went with it, unless a "satisfactory explanation" was given (Gray 2000, p. 47). During the last few years, GFC has paid a reduced trading rebate to members who have not been 100% loyal. In 2011, the penalty was increased to bonus shares; non-loyal members were awarded 80 cents/share instead of \$1/share. From 2012 onwards, members who are not 100% loyal will not receive trading rebates, bonus shares or any final profit distribution. These members will still retain their shares, for example:

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We have decided after all our members' meetings that if you are not a 100% supplier you will not get any dividend – no bonus this coming year and the new co-op rules have facilitated this because the old co-op rules wouldn't have allowed you to do that (GFC Board Member, 2011)

GFC has been able to implement this policy as they can easily monitor fishermen's daily trading through their depot managers, who notify them if they do not receive lobsters from a boat and from fellow-fishermen who are loyal suppliers and report free riders. In 2011, there were a total of 276 boats in the WA lobster fishermen's industry, out of which 140 were co-operative suppliers. The small number of suppliers enables this close monitoring and co-operative management recognises that most members are 100% suppliers. This behaviour supports the argument of spatial reciprocity, according to which competitive or exploitative behaviour is more easily undertaken without risk of reciprocity within transient or unstable populations (Nowak and Sigmund 2000). Smaller, tightly knit communities, such as the WA fishermen community, are more likely to sustain cooperative behaviour, self-punishing and reducing free riding.

Communicate member value

GFC and, particularly, MG highlighted the challenges associated with the generation gap. As a newer generation of members has not experienced a less competitive market without a co-operative presence, they have a sense of security that this competitive market, in which processors compete intensively for supply, will always be the status quo. But the challenge is whether that will always be the case. MG management feels a market without a co-operative would increase price pressures, especially for small farmers. It could, as some interviewees noted:

trigger a structural change where it's not get big or get out, it's get gargantuan or get out. (MG Executive Manager, 2011)

We have a generation of people that haven't seen the market without a co-operative there and there is nothing like experiencing the hardship. (MG Board Member, 2011)

Co-operatives identify the need to educate and motivate their members, especially the newer generation, but, interestingly, invest very little on structured marketing within the co-operative. Co-operatives in the primary industries with a product marketing arm have developed advanced marketing capabilities that are applied to external customers. Member communications and engagement is primarily undertaken through social networking, some form of internal communication (e.g. newsletters), providing opportunities to attend member meetings and by providing members with easier access to upper management and board members (in comparison to large investor-owned firms). Although such tactics are appropriate for communicating some messages to members, they are only partially able to support an effective member engagement strategy. Cooperatives need to recognise that their members are also their most important customers. Although using some of the co-operative services, members may not be aware of all the services available to them, the financial and non-financial benefits (short-term and longer-term) they receive through their involvement with the co-operative and which strategies are in place to ensure the future of the co-operative and increase the value it generates for its members. They may have a strong patron interest, but a lower interest and understanding than they would as an investor and owner of the business. A coherent strategy for the development and communication of the co-operative's member value proposition is a key aspect of resilient co-operatives that enjoy high member loyalty.

Balance the Four Member "Hats"

As was noted in the previous section, the member patron hat is likely to be dominant in most types of co-operative, particularly in cases of traditional co-operatives in which service influences the viability of members' own businesses and, thus, livelihoods (business to business co-operative). That is reasonable and desirable up to a point, as members' strong patronage is necessary to sustain a co-operative's operations. However, a number of challenges have been associated with the inability of members to transfer their ownership rights or see their equity appreciate over time, such as co-operative members' short-term perspectives and unwillingness to invest in their co-operative's future (Cook 1995). A key challenge in such co-operative structures is the inability of members to unlock the value in the co-operative's structure on retirement (as shares are paid back at par value). A successful co-operative that has built significant value over the years can face pressures for demutualisation when a large number of members exit at the same time. The ideological position – that the co-operative should not belong to anyone and the value that is created is a legacy for the future of the industry – is an argument that is difficult to sell. While some members are ideologically aligned with this belief, others are more comfortable with allowing some of the value to remain in the co-operative as an investment for future generations, while extracting some for their personal and family benefit.

Creating an investor interest

Co-operatives that develop members' interest as investors in the business, in addition to their primary patronage interest, can alleviate some of these challenges. Some cooperatives try to maintain their share capital close to the real value of the co-operative (by issuing more shares or revaluing shares. GFC, for example, issues bonus shares on an annual basis following this strategy). However, the risk with this approach is that the small pool of buyers may not generate enough demand to buy shares at their nominal price. If these shares are redeemable when a member exits, this could place a significant financial risk on the co-operative.

Another strategy is to enable members to retain their share capital on retirement and attract an investment dividend. Ideally these shares should not have voting rights, eliminating the risk of dry shareholders gaining decision-making power. As was discussed earlier, MG follows this strategy, which seems to have worked well for them, with few member complaints over the years and no control issues. GFC has applied a similar scheme, enabling non-active (retiring) members to roll their shareholding into a debenture, as, under the WA Co-operatives Act, only active suppliers can be shareholders.

A combination of the strategies of: (a) share capital reflecting true co-operative value, (b) an option to roll members' shares into a non-voting equity instrument that pays an attractive dividend on retirement, and (c) equity being tradable but non-redeemable, would provide a low-risk strategy for a co-operative that provides a good investor proposition for current and exiting members. In addition, best practice suggests co-operatives should retain up to 50% of profits prior to any rebate or dividend payment to a sunken equity account (not member owned) that serves the sole purpose of investment capital to ensure organisational resilience (discussions with Rabobank, 2011).

Proportional voting rights

A contingent issue within the co-operative space is whether to retain a one-memberone-vote principle. While one-member-one-vote ensures democratic governance and control, it can hinder the development of members' interests as investors and owners of the co-operative. A proportional voting right, capped at a maximum number of votes per member, encourages the investor hat, as more active members who invest in their co-operative are given more control. The mechanism of capping the maximum votes per person ensures a single person or a small minority cannot gain control of the co-operative. By aligning control power to ownership (number of shares), members are also encouraged to think as owners of the co-operative, beyond their role as patrons and investors. The downside is that the co-operative can compromise its democratic nature and could, potentially, be pushed closer to the investor-owned enterprise structure. However, cases such as MG show it is feasible to retain a strong co-operative nature under such an ownership and control structure, as well as retaining a resilient business model. We should not forget traditional co-operatives adhering to one-member-one-vote can also fail if larger members are dissatisfied and move to competitors, compromising co-operative efficiency. In conclusion, proportional voting, if administered effectively, can ensure larger members, who are critical for the resilience of the co-operative, develop a stronger investor and owner interest and become stronger supporters of the co-operative.

Transitioning to owner and community member

Finally, the transition from patron/investor to owner/community member is the most critical stage of members' engagement in a co-operative environment. This can be a gradual transition, as most new members initially join the co-operative with their patron hat. However, if management proves to them that their involvement with the co-operative is also a wise, low-risk investment, members begin to act with their investor hat on too. When members can see that a longer-term investment in their co-operative will result in significant benefits for members and their businesses, but will also benefit their local community and their industry, they start to think with their owner and community hats on. They gradually view the co-operative as their own business that can generate value for themselves and their community. They get more involved in their co-operative's affairs, develop a longer-term perspective and are less likely to free ride on an annual basis.

It should be noted that pacemaker co-operatives can experience a gradual increase of member heterogeneity, which can impact on members' identification with the cooperative. In most cases newly founded co-operatives attract members of similar size and/or need. However, as they evolve over time, various types or classes of members can emerge. When voting members/shareholders have differing needs, the co-operative will find it challenging to maintain a community feeling among its members. Whether following a one-member-one-vote or a proportional voting system, board and management will be faced with an increasingly complex task in trying to develop and maintain a common member identity.

CONCLUSIONS

Pacemaker co-operatives do not rely on price leadership; they are innovators that follow differentiation strategies to add value to their members and their businesses. The most significant challenge faced by pacemaker co-operatives in primary industries is the volatility of the external environment (markets and natural environment), which can lead the co-operative into a "downward spiral". Co-operatives' success strategies seem to depend on an ability to remain cost-efficient, as well as to spread the risk across product categories, export markets and production localities. Further, a co-operative's ability to successfully diversify into other (related) businesses can support its core business and mitigate the impacts of environmental volatility.

In addition, our analysis highlights that the development of flexible infrastructure, an investment in member loyalty and an ability to balance the four member identity hats are critical components of a resilient co-operative strategy. We have identified the importance of effectively defining and communicating member value, especially as co-operatives transition to a newer generation of members who have not experienced a market without a co-operative presence. The new generation of policy makers and decision makers are also largely unaware of the nature and benefits of the co-operative business model. There is a clear need for the co-operative sector to work collectively to lift its profile to ensure co-operatives have a resilient future in a world dominated by investor-owned businesses.

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